

GULYAYEVSKAYA, N.S.

The jerboa *Paradipus ctenodactylus* Vinogr. in the northeastern
Kyzyl Kum. Zool. zhur. 42 no.7:1110-1111 '63. (MIRA 17:2)

1. Aral'skoye otdeleniye Moskovskogo obshchestva ispytateley
prirody.

GULYAYEVSKAYA, N. S.

"The Digging Activity of the Blind-Rat Mole (Its Landscaping and Agricultural Significance)." Cand Biol Sci, Moscow State Pedagogical Inst imeni V. I. Lenin, 30 Dec 54. (VM, 22 Dec 54)

Survey of Scientific and Technical Dissertations Deferred at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

GULYAYEV-ZAYTSEV, S.S.

Investigating the chemical composition of the summer milk fat and
its fractions. Izv.vys.ucheb.zav.; pishch.tekh. no.5:33-36 '63.
(MIRA 16:12)

1. Leningradskiy tekhnologicheskiy institut kholodil'noy
promyshlennosti, kafedra tekhnologii moloka i molochnykh produktov.

BULGARIA / Pharmacology and Toxicology. Medicinal Plants.

v-8

Abs Jour : Ref. Zhur - Biologiya, No 17, 1958, No. 80664

Author : Brailski, Khr.; Gulybov, T.

Inst : Not given

Title : Influence of Fresh Cabbage Juice and Decoctions of Dried
Cabbage or Cauliflower on the Secretory and Motor Function
of the Stomach

Orig Pub : Syvrem. med., 1957, 8, No 8, 30-37

Abstract : In 102 patients, it was established that the juice of
fresh cabbage (I) and the extract of dried cabbage or
cauliflower (II) greatly increases the acidity of the
stomach juice (in 84% of the patients). Maximal increase
sets in in 1 hour. In a majority of patients, I and II
significantly strengthens and improves gastric peristalsis.
II is a stronger stimulant of gastric secretions than a
caffeine test breakfast, gives no side effect phenomena, and

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- APPROVED FOR RELEASE: 09/19/2001 · Medicinal Plants v-8
BULGARIA / Pharmacology and Toxicology · CIA-RDP86-00513R000617320019-2"

Abs Jour : Ref. Zhur - Biologiya, No 17, 1958, No. 80664

excites only the neuro-humoral phase. Therefore, during
the investigation of the neuro-humoral phase of gastric
secretion, it is proposed to replace the caffeine test
breakfast with a 7% II. It is assumed that I and II,
possibly, will be effective during treatment of patients
with achlorhydria and atonia of the stomach.

Card 2/2

GULAYEV, A., aspirant

Harmful insects in new irrigated areas. Zashch. rast. ot vred. i
bol. 9 no.3:19-20 '64. (MIRA 17:4)

1. Turkmenskiy institut zemledeliya, Ashkhabad.

L 62219-65 LEWT(1)/FCC Po-4/Pi-4 GW
ACCESSION NR: AP5017164

UR/0387/65/006/002/0050/0053
550.388

20
18
4

AUTHOR: Gul'yel'mi, A. V.

TITLE: The effect of Alfvén wave decay in the exosphere on the character of short-period oscillations in the earth's magnetic field

SOURCE: AN SSSR. Izvestiya. Fizika zemli, no. 2, 1965, 50-53

TOPIC TAGS: geomagnetic field, Alfvén wave, exosphere, hydromagnetic wave

ABSTRACT: The absorption of Alfvén waves in the exosphere is examined. The effective absorption mechanism of these waves may be the instability relative to disturbances arising from combination of Alfvén and slow magnetoacoustical waves. As a result of the instability, the energy of the Alfvén waves is transferred to irregular pulses and is finally dispersed. The increment of instability is proportional to the amplitude of the hydromagnetic velocity in the wave. An expression is readily obtained for the distance at which instability develops on the basis of an idealized model of the exosphere. The author assumes a dipole magnetic field with $H = 0.32 R^{-3}(1 + 3 \sin^2 \Theta)$, where R is the distance from the dipole, in earth radii, and Θ is the magnetic latitude. It is shown that the

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L 62219-65

ACCESSION NR: AP5017164

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ionosphere contributes very little to the development of instability. Alfvén and magnetoacoustical waves in the exosphere are distinguished by velocity, trajectory, absorption, and polarization. The local character of some phenomena, such as polarization, permits oscillations to be identified with transverse Alfvén waves. Waves of extraterrestrial origin have a sharp high-frequency boundary. The nature of this cutoff may be determined by the nature of the radiation source, by the propagation features of the hydromagnetic waves, or by both. For example, if waves are recorded on the earth with definite polarization, having a period of 5 sec and an amplitude of 0.1 γ (γ = instability increment), by considering wave attenuation of two orders during propagation through the exosphere, it may be said that the source is situated at a distance less than 5 radii. "The author expresses his thanks to V. A. Troitskaya for her interest in the work and for her discussions." Orig. art. has: 1 figure and 4 formulas.

ASSOCIATION: Institut fiziki zemli, Akademii nauk SSSR (Institute of Physics of the Earth, Academy of Sciences SSSR)

SUBMITTED: 05Nov63

ENCL: 00

SUB CODE: ES, AA

NO REF SOV: 002
Card 2/2 JC

OTHER: 006

AFANAS'YEV, S. G., kand.tekhn.nauk; EPSHTEYN, Z. D., inzh.;
KRIVCHENKO, Yu. S., inzh.; GUREVICH, B. Ye., inzh.; KOZIN, G. N., inzh.;
RUBINSKIY, P. S., inzh.; KUKURUZNYAK, I. S., inzh.; GUL'YEV, G. F.,
inzh.; CHIGRAY, I. D., inzh.

Operation of the "Krivorozhstal'" converter plant. Biul. TSIICHM
no.5:12-16 '61. (MIRA 14:10)

(Krivoy Rog-Metallurgical plants)
(Converters)

KRIVCHENKO, Yu.S.; KUDRINA, A.P.; GUL'YEV, G.F.; VIT', Ye.F.

Use of quartz sands for the ramming of steel pouring ladles.
Metallurg 8 no.2:17-20 F '63. (MIRA 16:2)

1. Krivorozhskiy metallurgicheskiy zavod.
(Iron and steel plants—Equipment and supplies)
(Sand, Foundry)

KUDRINA, A.P.; KRVCHENKO, Yu.S.; GUL'YEV, G.F.

Effect of physicochemical indices of basic refractories on the
stability of acid converter linings. Ogneupory 28 no.9:400-408
'63. (MIRA 16:10)

1. Krivorozhskiy metallurgicheskiy zavod im. V.I.Lenina.

KARNAUKHOV, V.V.; SOBOLEV, S.K., kand.tekhn.nauk; GUL'YEV, G.N.;
KOZIN, G.N.; KRIVCHENKO, Yu.S.

Automation of the determination of the stopping moment of
blowing in an oxygen-blown converter. Met.i gornorud. prom.no. 2:
26-28 Mr-Ap '64. (MIRA 17:9)

KUDRINA, A.P.; KRIVCHENKO, Yu.S.; GUL'YEV, G.F.

Service of the lining in a 55 ton converter. Met. i gornorud.
prom. no. 3844-46 My-Je '64. (MIRA 17:10)

NOVIKOV, A.N.; NEPSHA, A.V.; RODGOL'TS, Yu.S.; KORZHENEVSKIY, A.I.;
GUL'YEV, G.F.; KOZIN, G.N.; KUDRINA, A.P.

Valuable contribution of inventors and efficiency promoters
in the improved technical level of enterprises of refractories.
Ogneupory 29 no. 5:194-196 '64.

Resin-dolomite-magnesite unfired refractories for steel smelting
converters with a top oxygen blow. Ibid.:197-200 (MIRA 17:7)

1. Vsesoyuznyy institut ogneuporov (for Novikov, Nepsha,
Rodgol'ts). 2. Zavod "Magnesit" (for Korzhenevskiy). 3. Zavod
"Krovorozhstal'" (for Gul'yev, Kozin, Kudrina).

L 32236-65 EWT(d)/EWP(e)/SPA(s)-2/EWT(m)/EPF(c)/EPF(n)-2/EWP(v)/EPF/SPA(w)-2/T/
EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(l) ... Pab-10/Pf-4/Fr-4/Ps-4/Pe-1C/Pt-4 IJP(a)
ACCESSION NR: AP4046752 JD/NW/JG/AT/WH S/0226/64/000/005/0098/0101

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74
3

AUTHORS: Serdyuk, S.M.; Gul'yev, G.F.; Kozin, G.N.; Svet, A.L.

TITLE: Temperature control of converter metal by means of zirconium
boride cermet tips

SOURCE: Poroshkovaya metallurgiya, no. 5, 1964, 93-101

TOPIC TAGS: thermocouple, zirconium boride, converter process

ABSTRACT: Difficulties in replacing the insulated tips of a thermocouple during the production process were solved by using a clay plug and a supporting disk which close the opening of a converter and prevent the loss of metal regardless of the degree of erosion of the opening. Furthermore, the new device makes the use of oxygen possible to take apart the opening. The device has been successfully applied in the industrial production in a 50-ton converter. A thermocouple with a zirconium boride tip reflects all irregularities that may occur during the melting process such as changes in temperature, the amount of oxygen used, the location of the tuyeres, etc. As a result of continuous temperature control, the necessary information is obtained for the development of an

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L 32236-65

ACCESSION NR: AP4046752

automatic control system for temperature conditions in a Bessemer converter. The orig. art. has: 5 figures.

ASSOCIATION: Institut avtomatiki Gosplana UkrSSR (Institute of Automation, Gosplan UkrSSR); Zavod Krivorozhstal' (Krivorozhstal' Plant)

SUBMITTED: 17Dec63

ENCL: 00

SUB CODE: MM, DP

NR REF Sov: 004

OTHER: 001

Card 2/2

GUL'YEV, G.F., inzh.; KRIVCHENKO, Yu.S., inzh.; BOL'SHAKOV, V.A., inzh.;
KUDRINA, A.P., inzh.; LEBEDEV, S.Ye., inzh.; CHIGRAY, I.D., inzh.;
SERVETNIK, V.M., inzh.

Converter smelting with partial use of tap cinder. Stal' 24
no.10:881-884 O '64. (MIRA 17:12)

KUDRINA, A.P., inzh.; GOL'YEV, G.F., inzh.

Increasing the life of converter linings. Stal' 24 no.11:982-685
N '64. (MIRA 18:1)

Received 10-10-1947, C. L. M. T. (U.S.A.)

Utilizing the sulfur absorptive capacity of tap cinder in the oxygen-blown converter process of steel production. Izv. vys. ucheb. zav.; chern. met. 8 no.2:65-67 '65.

U. Dnepropetrovskiy metallurgicheskiy institut.

(Mika 18:2)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R000617320019-2"

SPPDYTK, S.M., SOBOLEV, P.K., kand. tekhn. nauk. KONOVO, M.I., kand.
tekhn. nauk. KOZIN, G.N., SUL'YEV, S.F., RACHKOV, V.N.

Continuous measurement of metal temperature and carbon content
control in a converter during scavenging. Avtom. i prib.
no. 1(12-14) Fev. '65. (MIRA 18;8)

SERDYUK, S.M.; GUL'YEV, G.F.; KOLIN, G.N.; SVET, A.I.

Metal temperature control in converters with the use of ceramic metal zirconium boride tips. Porosh.met., 4 no.5:98-101 S-0 '64.
(MIRA 18x10)

1. Institut avtomatiki Gosplana UkrSSR i zavod "Krevorozhstal".

TSELYUKO, Yu.I.; VISHNEVSKAYA, L.A.; GUL'YEV, G.F.; Prinimali uchastiye:
CHUDNOVSKIY, F.Ya.; ANDRYUSHCHENKO, V.N.

Temperature field of a 50-ton converter lining. Ogneupory
30 no.10:15-21 '65. (MIRA 18:10)

1. Nauchno-issledovatel'skiy i proyektnyy institut
metallurgicheskoy promyshlennosti (for Tseluyko, Vishnevskaya).
2. Krivorozhskiy metallurgicheskiy zavod (for Gul'yev).

CHIGRAY, I.D., inzh.; KUDRINA, A.P., inzh.; GUL'YEV, G.F., inzh.;
SIZENKO, A.S., inzh.

Preparation for the operation of an oxygen-blown converter
lined with unfired resin binder refractories. Stal' 25
no.4:325-326 Ap '65. (MIRA 18:11)

Subject: Soviet military aircraft, MiG.

Effect of one limitation of burning on the stability of
various MiG aircraft configurations. Frequency 30 sec, 11/1966
'65. (MRA 33:1)

To: All concerned by metallurgy, metal inert gas, welding.

GALATOV, N.S.; NESTEROVA, A.L.; KUDRINA, A.P.; GUL'YEV, G.F.; BASHLIY, V.I.

Industrial production of dolomite refractories with a resin
binder and their service in 50-ton converters. Met. i gornorud.
prom. no.6;42-45 N-D '65. (MIRA 18;12)

GUL'EV, P. K.,
Shumerlinsk Vet. Bact. Lab., Ch. SSR Chuvash ASSR
"Epizootiology of paratyphous abortion of horses."
SO: Veterinarija 26(9), 1949, p. 26

GUL'YEV, P. K.

LC

USSR/Medicine - Infectious Diseases
(Veterinary)

May 51

"Infection of Horses With Anthrax After Forced
Vaccinations With STI Anti-Anthrax Vaccine,"
P. K. Gul'yev

"Veterinariya" Vol XXVIII, No 5, p 35

At location unsafe with respect to anthrax,
forced vaccinations with STI were carried out on
clinically healthy horses which had no fever.
From 3d to 9th day after vaccination, horses be-
came infected with carbuncular form of anthrax.
From 10th day on, no horses became sick: Lasting

182T78

USSR/Medicine - Infectious Diseases
(Veterinary) (Contd) May 51

immunity was acquired. This shows that under
epizootic conditions forced vaccination with
STI should not be carried out, because the horses
acquire natural anthrax during neg immunization
phase which lasts for 10 days. In forced vaccina-
tions, passive immunization should be applied
followed by reinforcement with active immuni-
tation, or combined vaccination carried out.

LC

182T78

GUL'YEV, P. K., (Director of Chuvash Republic Veterinary Bacteriological Laboratory)

On the utilization of wheat, treated with disinfectants, for poultry feeding.

Veterinariya vol. 31, no. 7, July 1961 p. 76.

GUL'YEV, P. K., CAND VET SCI, "EPIZOOTOLOGY OF PARATYPHOID
ABORTION OF HORSES IN ^{the} CHUVASHSKAYA ASSR." CHEBOKSARY, 1959.
(LENINGRAD VET INST OF ~~MIN~~ [MIN OF AGR] RSFSR). (KL-DV,
11-61, 226).

-224-

KRAAK, E.; GUL'YEV, P.K.; LEBEDINSKIY, I.S., assistant; BELOKHVOSTOV, S.D.; PASYUKOV, V.M.; RYABUSHKIN, Z.V.; SUVOROV, V.S.; BOCHAROV, A.P.

Sanitation, veterinary hygiene, and disinfection. Veterinariia 38 no. 7:75-79 Jl '61. (MIRA 16:6)

1. Institut pitaniya Potsdam-Rebryuke, Germaneskaya Demokratičeskaya Respublika (for Kraak). 2. Direktor Chuvashskoy respublikanskoy veterinarno-bakteriologicheskoy laboratori (for Gul'yev). 3. Khar'kovskiy zooveterinarnyy institut (for Lebedinskiy).

(Veterinary hygiene)

YEPIFANOV, G.F.; VARDOSANIDZE, D.G.; ALIVERDIYEV, A.A.; GUL'YEV, P.K.

Information and brief news. Veterinariia 38 no. 7:95-96
Jl '61. (MIRA 16:8)

(Veterinary medicine)

USSR/Human and Animal Morphology. Methods and Techniques of Study. S

Abs Jour: Ref Zhur-Biol., No 15, 1958, 69521.

Author : Gulyev, V.P.

Inst :

Title : The Use of Gelatin as a New Means of Enclosing Biological Objects in Preparing Ultrathin Slices for Electron Microscopy.

Orig Pub: Uspekhi Sovrem. Biol., 1957, Vol. 44, No 2, 281-284.

Abstract: Striated muscle tissue of the axolotl was fixed in osmic acid (pH 7.4-7.5) for 20 hours at a temperature of one degree, and after a washing in tap water or Ringer's solution (one to four hours), was transferred to a 20 percent solution of gelatin

Card : 1/2

6' UI YEV, V. Sh.

USSR/Cultivated Plants. Medicinal Plants. Essential Oil Plants.
Toxic Plants.

M

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 3484L

Author : Culycov V.Sh.

Inst : AN AzebSSR

Title : Toxicity of Certain Alkaloid-Bearing Plants (According to
Phases of Development) in Summer Pastures of the Small
Caucasus (Malyiy Kavkaz).

Orig Pub : Dokl. AN AzebSSR, 1957, 15, No 6, 683-687

Abstract : Ten new species of alkaloid-bearers growing on summer pas-
tures of the Small Caucasus (sectors of the Kol'badzharskiy
and Lachinskiy rayons) have been ascertained. Toxicity of
these plant species sharply varies according to phases of
development, and also in the green and dry state. --
Lipaeva.

Card : 1/1

GULYEV, B.B.; GET'MAN, A.A.

Characteristics of the coefficient of flow in gating systems.
Lit.proizv. no.7:3-4 Jl '64. (MIRA 18:4)

AYZIN, B.A.; POLETAYEV, A.A., redaktor; GULYGA, A.V., redaktor; NEV-
RAYEVA, N.A., tekhnicheskiy redaktor.

[Upswing of the workers' movement in Germany at the beginning of
the 20th century, 1903-1906] Podzem rabochego dvizheniya v Ger-
manii v nachale XX veka (1903-1906gg). Moskva, Izd-vo Akademii
nauk SSSR, 1954. 160 p. (MLRA 8:2)
(Germany--Labor and laboring classes)

GULYGA, A. V.

Dissertation defended for the degree of Doctor of Philosophical Sciences
at the Institute of Philosophy

"From the History of German Materialism of the Last Third of the XVIII
Century."

Vestnik Akad. Nauk, No. 4, 1963, pp 119-145

GULYUA, A. V.

"Obshchestvennyy progress i khudozhestvennaya kul'tura."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences,
Moscow, 3-10 Aug 64.

SOV/137-59-1-297

Translation from Referativnyy zhurnal Metallurgiya, 1959, Nr 1, p 37 (USSR)

AUTHOR. Gulyga, D. V.

TITLE The Combustion of Coke in a Large Blast Furnace (Goreniye koksa v bol'shoy domennoy pechi)

PERIODICAL: V sb. Domennoye proiz-vo. Moscow, Metallurgizdat, 1957, pp 100-111

ABSTRACT: The process of coke combustion in the vicinity of the tuyères was investigated on blast furnaces (1233-1300 m³ capacity) of the "Azovstal'" plant, the samples of gas from the hearth being withdrawn from regions situated along the axis of the tuyères. The combustion process varies under the action of an intense spherical circulation of coke occurring in front of the tuyères. A different type of combustion, characterized by the presence of a region possessing an approximately constant O₂ and CO₂ content and located within the loosened portion of the combustion zone (CZ), was predominant in furnaces which were operating with a more intense blast. The loosened zone is always smaller but is dimensionally proportional to the over-all expanse of the CZ, the magnitude of

Card 1/2

SOV/137-59-1-277

The Combustion of Coke in a Large Blast Furnace (cont.)

which may be determined from the variations in the composition of gases. A relationship was observed between the variations in the kinetic energy, or the quantity of blowing, and the variations in the contours of the tuyère zone. Although the absence of an obvious relationship between the extent of the CZ and the temperature of the blast is noted, the effect of the total heat reserve of the hearth on the dimensions of the CZ is pointed out. Variations in the length of the CZ, which may attain 200 mm at a total length of the loosened zone of 1100-1300 mm, are attributed to variations in secondary factors such as an increase in the density of coke around the CZ, the nature of the flow of liquid materials, etc.

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Card 2/2

SOV/133-58-2-2/30

AUTHORS: Raspov, I.V., Detsent, and Gorbaney, Ya.S.,
Gulyga, D.V., Engineers

TITLE: The Production and Smelting of Fluxed Sinter from the
Kerch' Ores (Proizvodstvo i domennaya plavka
oflyusovannego aglomerata iz Kerchenskikh rud)

PERIODICAL: Stal', 1958, Nr 8, pp 676 - 682 + 1 plate (USSR)

ABSTRACT: The production of fluxed sinter ($\text{CaO}/\text{SiO}_2 = 0.6-0.9$)
and the results of operation of blast furnaces with 30%
of sinter in the burden are described. Operating indices,
material, heat and hydrogen balances of the furnace
operation with sinters of basicities 0.16, 0.6 and 0.9
are given in Tables 4, 6, 7 and 8, respectively. Main
points: for each ton of limestone withdrawn from the
burden by increasing the sinter basicity from 0.16 to
0.6, a saving in coke of 365 kg was obtained. With
further increase in basicity to 0.9, the amount of coke
saved per 1 000 kg of limestone withdrawn from the
burden decreased to 283 kg. Above 40% of hydrogen intro-
duced into the furnace was oxidised to water. From 15
to 20% of As present in the sinter mix is removed during
sintering. Conclusions: 1) on smelting a burden
consisting of 80% of sinter and 20% of ore, an increase

Card1/2

AU/17; -91-3/30

The Production and Smelting of Flaked Slag from the Kerchensk Ores

in the sinter basicity from 0.16 to 0.6 increased the furnace output by 6% and decreased the coke rate by 8%; the cost of iron was decreased by 10 roubles/ton. The above increase in sinter basicity was accompanied by a decrease in the limestone charged directly to the furnace by 32%; 2) for further improvement of the furnace performance, better screening of sinter is necessary. There are 8 tables, 4 figures and 3 Soviet references.

ASSOCIATIONS: Zhdanovskiy metallurgicheskiy institut (Zhdanov Metallurgical Institute) and Zavod "Azovstal'" ("Azovstal'" Works)

Card 2/2 1. Sintered ores--Production 2. Blast furnaces--Operation
 3. Iron--Production

SCV/133-78-6-3/30

AUTHORS: Lukashov, G.G., Gorbanov, Ya.S., Prikhod'ko, I.D. and
Gulyga, D.V., Engineers

TITLE: A Study of the Movement of Materials in a Blast Furnace
Using Radicactive Indicators (Izuchenie dvizheniya
materialov v dovannoy pechi s pomoshch'yu radioaktivnykh
indikatorov)

PERIODICAL: *Stal'*, 1958, Nr 8, pp 682 - 687 (USSR)

ABSTRACT: The above investigation was carried out using radioactive
phosphorus and cobalt which were enclosed in lumps of
limestone, coke and steel shells (Figure 1) on two furnaces
operating with a 100% sinter burden (30% of fluxed sinter,
 $\text{CaO}/\text{SiO}_2 = 0.9$). Radicactive specimens were introduced
into the furnace through a pipe (Figure 2) at the following
distances from the inwall: 110, 460, 860, 1 370, 2 250
and 3 150 mm. The rate of descent was determined either
by the appearance of radioactivity in the iron (samples
were taken at the beginning, middle and the end of the
casting) or using counters enclosed in water-cooled probes
(Figure 2) which could be introduced at various furnace
levels (Figure 3). The experimental results are given
in Tables 2-4 and Figures 5, 6 and 7. It was found that:

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A Study of the Movement of Materials in a Blast Furnace Using
Radioactive Indicators

- A.V./153-58-3-3/30
- 1) under normal operating conditions, burden materials descend at a minimum rate on the periphery and at a maximum over the zone of combustion of coke in front of tuyeres. Mean rates of descent of materials in the furnace cross-section vary. Under certain conditions, the maximum rate of descent can appear in the central zone;
 - 2) the distribution of the maximum rate of descent along the furnace height was as follows: up to 10 m/h in the top part, in the middle part of the stack up to 4-5 m/h and in the bottom third of the stack up to 3.5 m/h;
 - 3) deviations of the path of materials from vertical could not be determined by the set-up used in the experiments;
 - 4) the actual deviations of the paths of the individual burden components can take place not only towards widening of the stack but also towards zones with a maximum rate of descent;
 - 5) the most economical operation of the furnace was characterised by the following distribution of mean relative velocities of the descent materials :

Card2/3

SCV/133-58-8-3/30

A Study of the Movement of Materials in a Blast Furnace Using
Radioactive Indicators

Distance from
the inwall of 0-200 400-1 000 1500-2000 centre
the throat, mm

Mean relative
velocity; 80 100 95 85
mm/min

6) the overtaking in time of coke by limestone during
the descent from the stock level to tuyere level is about
10 - 30 min. The maximum overtaking relates to sectors
with a minimum rate of descent. There are 4 tables and
7 figures.

ASSOCIATION: Zaved "Azovstal'" ("Azovstal'" Works)

Card 3/3 1. Blast furnaces--Performance 2. Radioisotopes--Applications

VOLOSHIN, A.I.; BOGOYAVLENSKIY, K.A.; AKHTYRCHENKO, A.M.; TURIK, I.A.;
ZHIDKO, A.S.; LYALYUK, V.S.; GABAY, L.I.; OMOPRIYENKO, V.P.;
STARSHINOV, B.N.; BABIY, A.A.; SAVELOV, N.I.; Prinimali
uchastiye: TORYANIK, E.I.; VASIL'YEV, Yu.S.; SHEMEL', T.I.;
SENYUTA, V.I.; BONDARENKO, I.P.; AMSTISLAVSKIY, D.M.;
ANDRIANOV, Ye.G.; SERGEYEV, G.N.; ZAMAKHOVSKIY, M.A.;
LYUKIMSON, M.O.; IVONIN, V.K.; TSIMBAL, G.I.; SEN'KO, G.Ye.;
KONAREVA, N.V.; SOLODKIY, Yu.L.; LUKASHOV, G.G.; TARASOV, D.A.;
GORBANEV, Ya.S.; SUPRUN, I.Ye.; TIKHOMIROV, Ye.I.; KONONENKO, P.A.;
PROKOPOV, V.N.; GULYGA, D.V.; PLISKANOVSKIY, S.T.; PONOMAREVA, K.Ye.

Effect of the length of coking on coke quality and the performance
of blast furnaces. Koks i khim. no.12:26-32 '61.

(MIRA 15:2)

1. Ukrainskiy uglekhimicheskiy institut (for Voloshin,
Bogoyavlenskiy, Akhtyrchenko, Turik, Zhidko, Lyalyuk, Toryanik,
Vasil'yev, Shemel'). 2. Zhdanovskiy koksokhimicheskiy zavod
(for Gabay, Senyuta, Bondarenko, Amstislavskiy, Andrianov,
Sergeyev, Zamakhovskiy, Lyukimson, Ivonin, TSimbal). 3. Ural'skiy
nauchno-issledovatel'skiy institut chernykh metallov (for
Onopriyenko, Starshinov, Babiy, Sen'ko, Konareva, Solodkiy).
4. Zavod "Azovstal'" (for Savelov, Lukashov, Tarasov, Gorbanev,
Suprun, Tikhomirov, Kononenko, Prokopov, Gulyga, Pliskanovskiy,
Ponomareva).

(Coke)
(Blast furnaces)

KULIKOV, Ya. P., inzh.; SOROKIN, V. A., doktor tekhn. nauk;
PLISKANOVSKIY, S. T., inzh.; GULYGA, D. V., inzh.;
KAMINSKIY, G. P., inzh.; KOZHUKH, V. Ya., inzh.

Automatic control of thermal conditions in blast furnaces. Met.
i gornorud. prom. no.1:6-10 Ja-F '63. (MIRA 16:4)

(Blast furnaces)
(Automatic control)

GULIGA, D.V., inzh.; GORBANEV, Ya.S., inzh.; CHEREPIVSKIY, A.A., inzh.

Studying the flow of charge materials in blast furnaces during
the smelting of Kamysh-Burun sinters. Stal' 23 no.8:686-689
Ag '63. (MIRA 16:9)

1. Metallurgicheskiy zavod "Azovstal'."
(Blast furnaces)

STARSHINOV, B.N.; SINITSKIV, V.D.; SEN'KO, G.Ye.; GULYGA, D.V.; BABIY, A.A.; KHORUZHII, A.G.; Prinimali uchastiye: OSTROUKHOV, M.Ya.; SAVENOV, N.I.; PLISKANOVSKIY, S.T.; MOISEYEV, Yu.G.; LAVPENT'YEV, M.L.; TARASOV, F.P.; ZAGREBA, A.V.; KAMENEV, R.D.; TKACHENKO, A.A.; FREYDIN, L.M.; LUKIN, P.G.; POPOV, Yu.A.; MISHIN, P.P.; KARACHENTSEV, M.D.; DOLMATOV, V.A.; AYUKOV, A.S.; PALAGUTA, V.P.; VYAZOVSKIY, Yu.V.; SOLODKIY, Yu.A.; KONAREVA, N.V.; SAPRONOV, Yu.V.; SINITSKAYA, S.K.; SAPRONOV, B.V.; LEKAREV, V.L.; STOLYAR, V.V.; PROKHORENKO, Z.A.; BANDINA, Ye.Ye.

Results of the first year of operation of large capacity blast furnaces. Sbor. trud. UNIIM no.11:34-46 '65.

(MIRA 18:11)

USSR/Farm Animals - Cattle

Q

Abs Jour : Ref Zhur - Biol., No 15, 1958, 69272
Author : Gulymina, T.A.
Inst : Scientific Research Institute of Agriculture of the Extreme North
Title : Study of Typical Rations under Conditions of the Polar Zone
Orig Pub : Byul. nauchno-tekhn. inform. N.-i. inti s. kh. Krayn. Severa, 1957, No 2, 17-18

Abstract : The first group of cows received 50 kg of the green mass, 4 kg of a mixture of concentrates and roughages prepared industrially, and one kg of cottonseed meal; the second group, instead of cottonseed meal, was fed 3 kg of fist waste. The coefficients of digestibility in the 1st group were: dry matter 78.2, organic substance 80.8,

Card 1/2

- 22 -

Abs Jour : Ref Zhur - Biol., No 15, 1958, 69272

APPROVED FOR RELEASE: 09/19/2001, CIA-RDP86-00513R000617320019-2"

genous extractive substances 83.56, ash 44.31. The digestibility coefficients in the 2nd group were: 77.57, 79.64, 76.68, 71.34, 78.21, 82.67 and 53.80, respectively.

Card 2/2

ZABRODOVYI, S. S.; ANTONISHIN, N. V.; OULYUK, A. M.; SEMKOVICH, V. A.

"Rapid reduction heating of metallic blanks in the fluidized bed of an intermediate heat exchanger."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minek, L-12
May 1964.

Inst of Heat & Mass Transfer, AS BSSR.

GULYUK, N.G., nauchnyy sotrudnik

Seasonal and daily rhythms of labor in women. Relation of some complications in labor to the daily rhythm of labor activity.
Akush.i gin. no.6:45-49 '61. (MIRA 14:12)

1. Iz L'vovskogo nauchno-issledovatel'skogo instituta okhrany materinstva i detstva (dir. - kand.med.nauk L.Ya. Davydov).
(PERIODICITY) (LABOR, COMPLICATED)

GULYUK, N.G., nauchnyy sotrudnik (L'vov,17,ul.Mayankovskogo,d.109/2)

Device for the anesthesia apparatus for removing expired ether
and gas vapors from the operating room. Klin.khir. no.7:80 Jl
'62. (MIRA 15:9)

1. L'vovskiy nauchno-issledovatel'skiy institut Okhrany
materinstva i detstva.
(ANESTHESIOLOGY--APPARATUS AND INSTRUMENTS)

GULYUK, N.G.

Artificial respiration apparatus for newborn infants. Vop.ohh.mat.i
det. 7 no.7:51-54 Jl '62. (MIRA 15:11)

1. Iz L'vovskogo nauchno-issledovatel'skogo instituta okhrany
materinstva i detstva (dir. - kand.med.nauk L.Ya.Davydov).
(ASPHYXIA NEONATORUM) (RESPIRATORS)

GULYUK, N.G., mladshiy nauchnyy sotsial'nik

Movable table with equipment for resuscitation of asphytic newborn infants. Akush. i gin. no.6:33-37 N.D '63. (MIRA 17:12)

1. Iz L'vovskogo nauchno-issledovatel'skogo instituta okhrany materinstva i detstva (direktor - kand. med. nauk L.Ya. Davydenko).

GULYUTKIN, A.I., starshiy prepodavatel'

Dynamics of gear mechanisms with several degrees of freedom.
Izv.vys.ucheb.zav.; mashinostr. no.10:59-74 '61.

(MIRA 14:12)

1. Bronetankovaya akademiya.
(Gearing)

GULYUTKIN, K. N.

32509. Gulyutkin, K. N. Stakhanovskiye shkoly na shaturskikh torfopredpriyatiyakh. (S primech. red.) Torf. prom-st', 1949, No. 10, s. 18-19.

SO: Letopis' Zhurnal'nykh Statey, Vol. 44

DOBRYAKOV, A., inzh.-polkovnik; GULIV, G., inzh.-podpolkovnik

Manometer needle was stopped. Starsh.-serzh. no.4(7):27 Ap
'61. (MIRA 14:7)
(Tanks (Military science))

USSR/Processes and Equipment for Chemical Industries
Processes and Apparatus for Chemical Technology

K-1

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 14189
Author : Gulyy I.S.
Inst : Kiev Technological Institute of the Food Industry
Title : Procedure for Calculation of Crystallization Vessels
Orig Pub : Tr. Kievsk. tekhnol. in-ta pishch. prom-sti, 1956, 2,
37-42

Abstract : A graphic-analytical method is proposed for the design calculation of massive crystallization vessels of sugar refineries which consists in dividing the apparatus into a number of sections and determining the cooling surface area of each section by the method of finite differences.

Card 1/1

- 25 -

ROSTRIOPENKO, I.A.; GULYY, I.S.

Processing raw cane sugar. Sakh.prom. 34 no.10;20-24 o '60.
(MIRA 13:10)

1. 2-y Petrovskiy sakharnyy zavod.
(Petrovskoye (Kharkov Province)--Sugar cane)

GULYY, I.S.; POPOV, V.D.

Outfitting the section of continuous sugar crystallization without
the boiling of massecuites. Trudy KTIPP no.22:48-55 '60.
(MIRA 14:3)
(Sugar manufacture)

GULYY, I.S.; POPOV, V.D.

Studying the heat exchange in the cooling of massecuite in
crystallizers. Trudy KTIPP no.24:44-54 '61. (MIRA 15:6)
(Sugar manufacture) (Heat--Transmission)

GULYY, I.S.; POPOV, V.D.

Effect of the rate of rotation of the heat exchange surface of
crystallizers on the intensity of massecuite cooling. Trudy
KTIPP no.24:59-64 '61. (MIRA 15:6)
(Sugar manufacture)

GULYY, I.S.; POPOV, V.D.

Relationship between the amount of heat eliminated from the
massecuite and massecuite temperature in the process of its
cooling in crystallizers. Trudy KTIPP no.25:112-117 '62.

(Sugar manufacture) (Vacuum apparatus) (MIRA 16:5)

GULYAN, I. S.; FOMOV, V. D.

Criterion equation for the thermal design of manganite
crystallizers with cooling. Trudy KTI^{DP} no. 27:86-90 '63.
(MIR 17:5)

BLOKONI, T.A.; GILLY, J.S.

Relation between heat and mass transfer during manganese
cooling in crystallizers. Trudy KTRP no.27(90-96) '69.
(MIRA 1715)

GULYY, I.S., kand. tekhn. nauk

Studying heat exchange in industrial masscuite crystallizers
with continuous action. Pishch. prom. no.2:116-126 '65.

(MIRA 18:11)

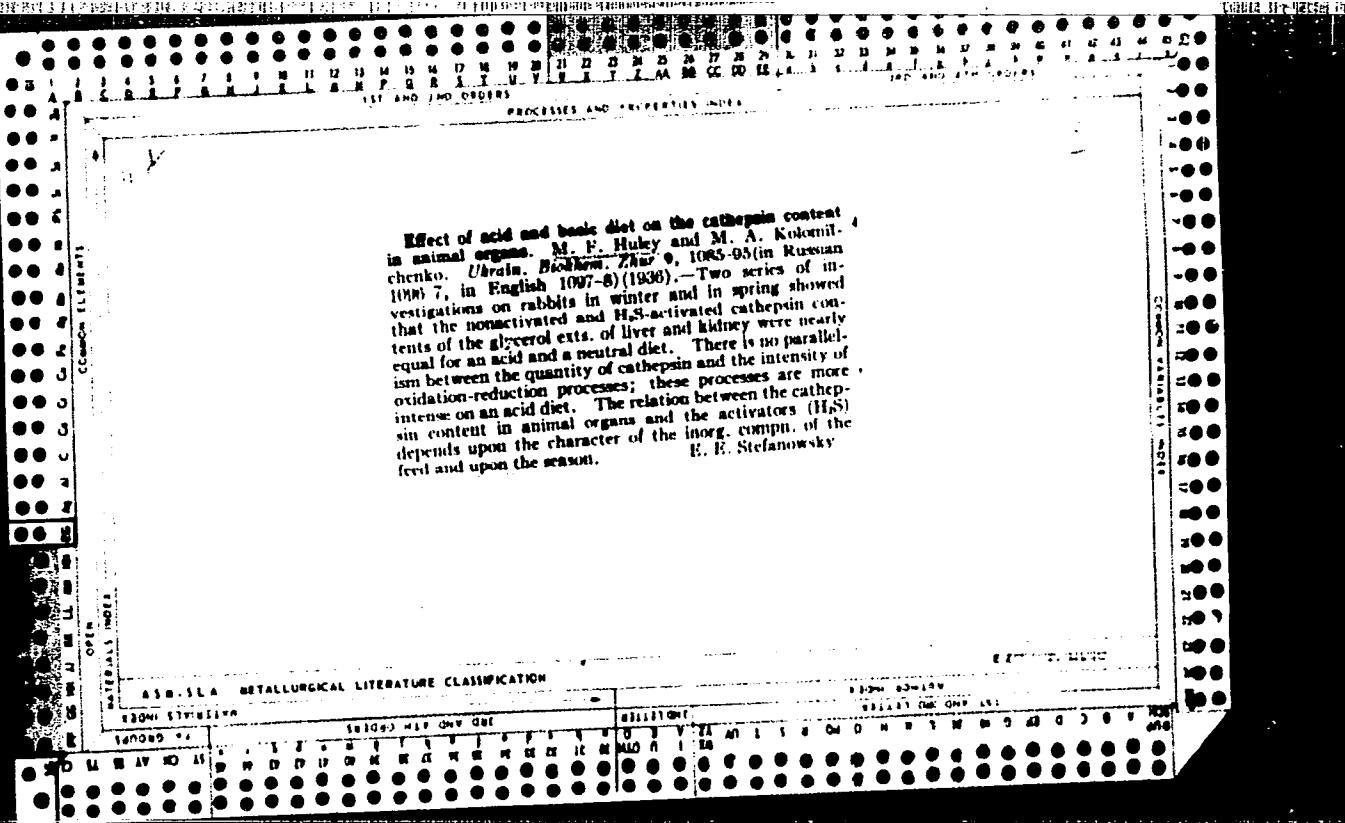
1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlen-
nosti.

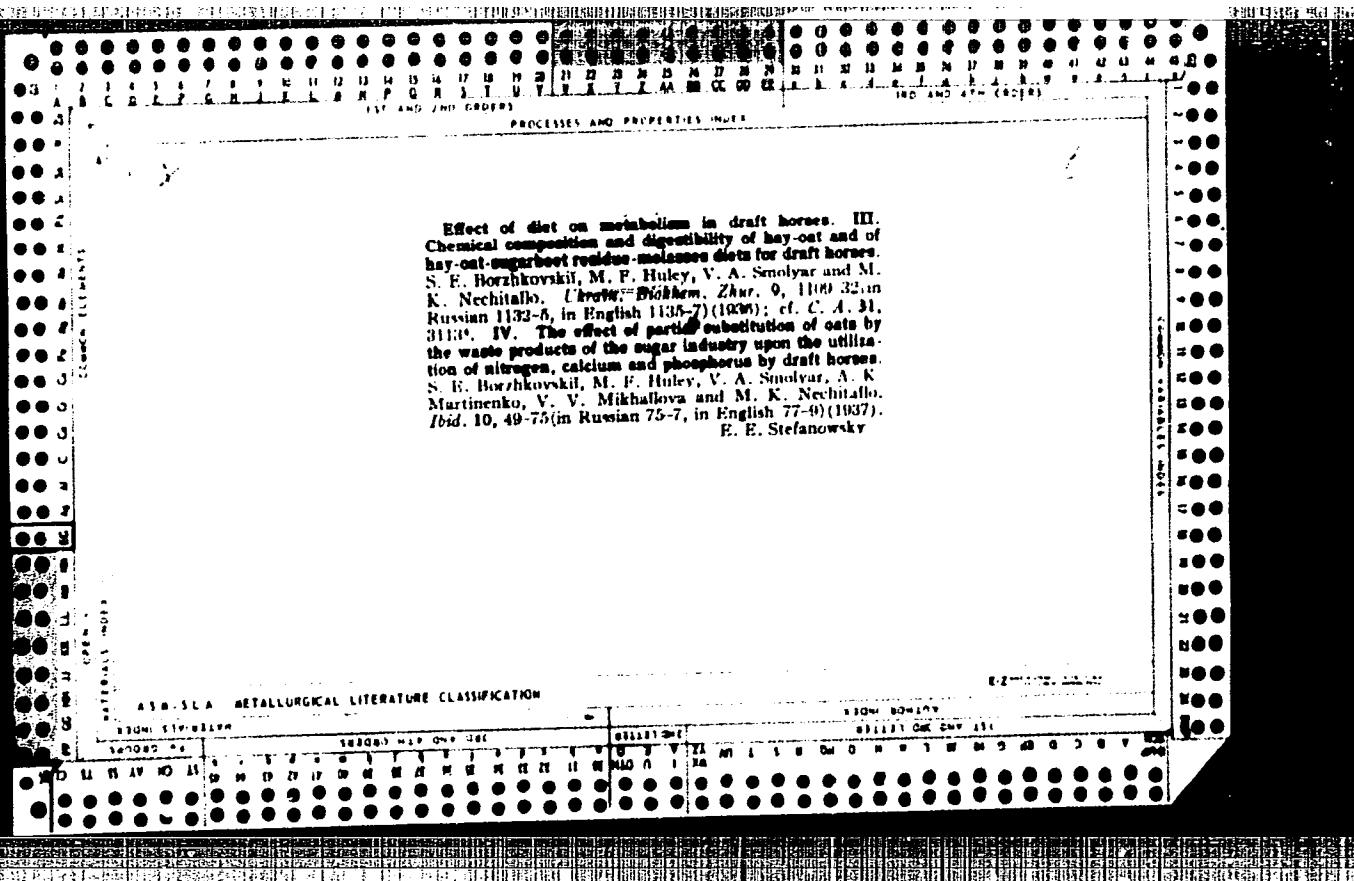
Effect of acid and alkaline diet on oxidation processes in muscles during labor and training. M. P. Gulya. *Zhurn. Biokhim. Zhar.* 9, 369-17 (in Russian) 317-18. Ukraine. English 319-20 (1936).—The disturbance of the oxidative processes of muscles (rabbit biceps femoris) is less pronounced on an acid than an alk. diet. Training causes greater changes in the oxidation-reduction processes on an acid diet, the difference in the effects of the two diets being even greater than in fatigued muscles. E. B. S.

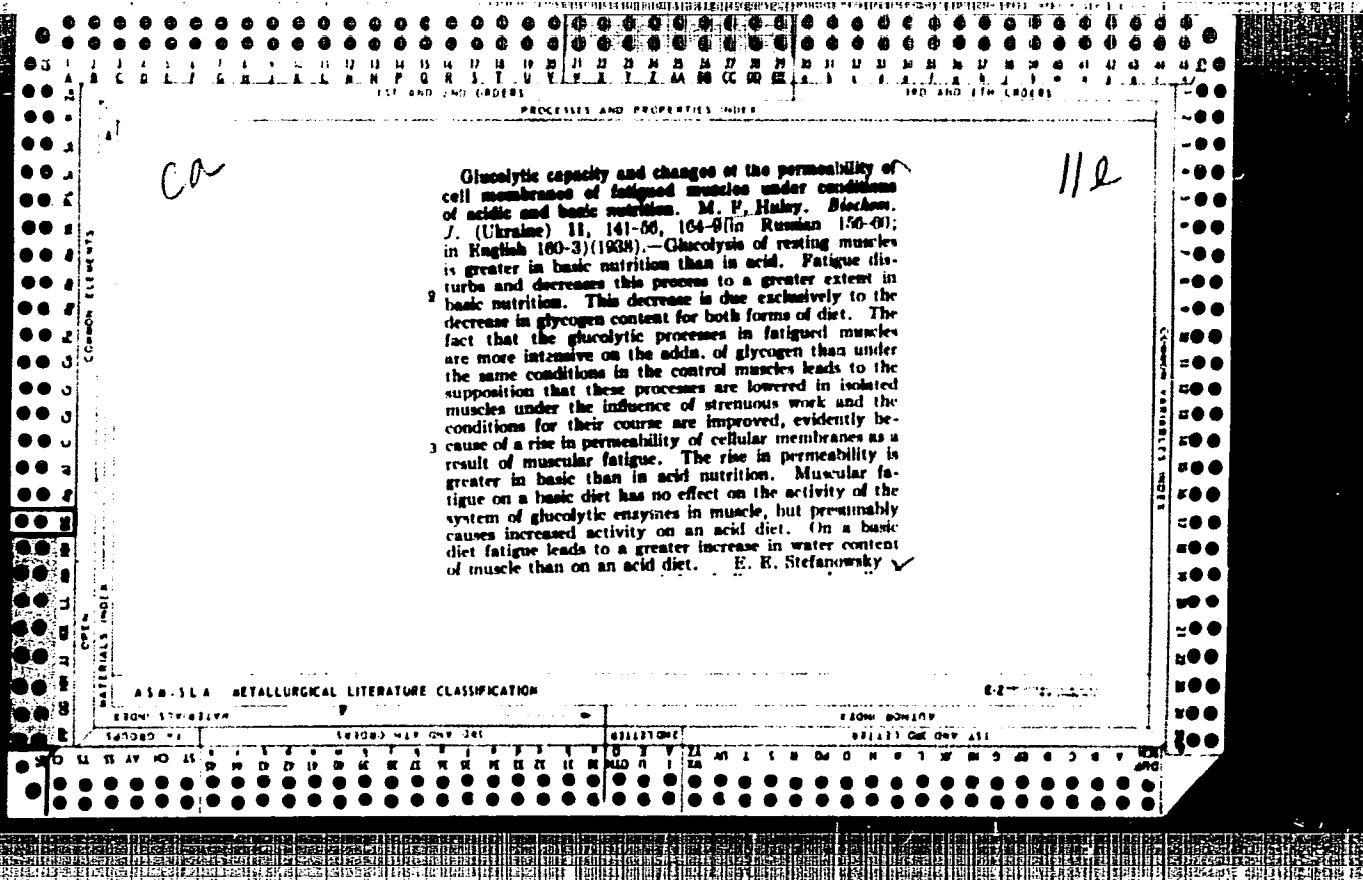
ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

E-2-1000-42102

100-1000-1000







cia

Glucolytic processes in trained muscles. M. I. Titov
Bukhem, I. (Ukraine) 11, 297-304 (in Russian); 1964-73; in
English, 305, 6 (1968). The data of Embden and Babes
(C. R. 22, 150) and of Stoeniv and Chepinoga (C. R. 31,
3128) indicating that the intensity of glucolytic processes
is higher in trained than in untrained muscles have been
confirmed. This increase is caused by a higher glycogen
content, the activity of the glucolytic enzymes and the
permeability of cell membranes apparently remaining un-
changed under the influence of training.

E. E. Stefanowsky

ASW 35A - METALLURGICAL LITERATURE CLASSIFICATION

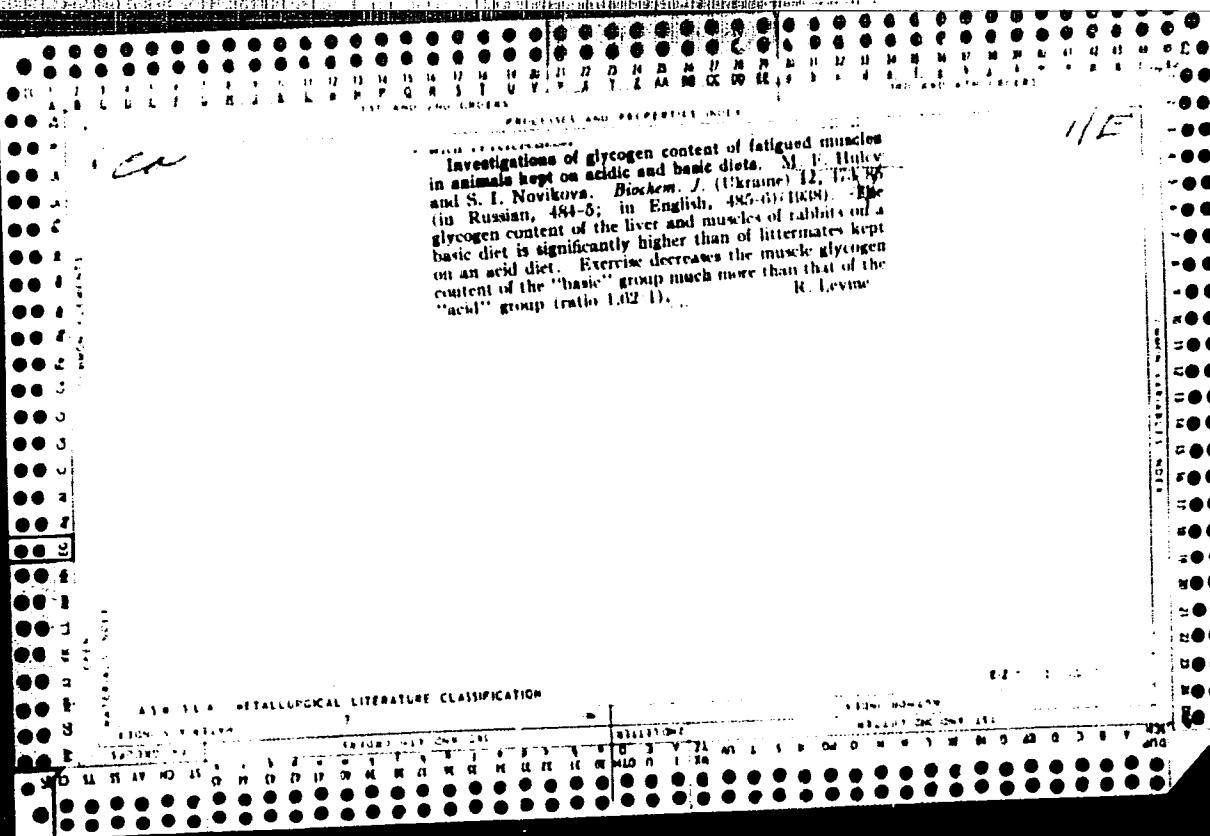
Glycolytic processes in fatigued muscles with diets containing an excess of acids or bases. M. P. Huley. *Biochim. J.* (Ukraine) 12, 31-35 (Russian, '38; in English, '39)(1938).—Lactic acid production is more intense in resting muscles from rats fed on basic diets. The rate of glycolysis falls after fatigue, the fall corresponding to the decrease in muscle glycogen. When glycogen is added, the fatigued muscles produce more lactic acid than the control resting muscle with glycogen added *in vitro*. The difference in rate of formation of lactic acid

thus appears likely that pantothenic acid is one of the substances in liver extract which are necessary for rat growth. C. J. West

CLASSIFICATION
BY SUBJECT

ALB SEA - METALLURGICAL LITERATURE CLASSIFICATION

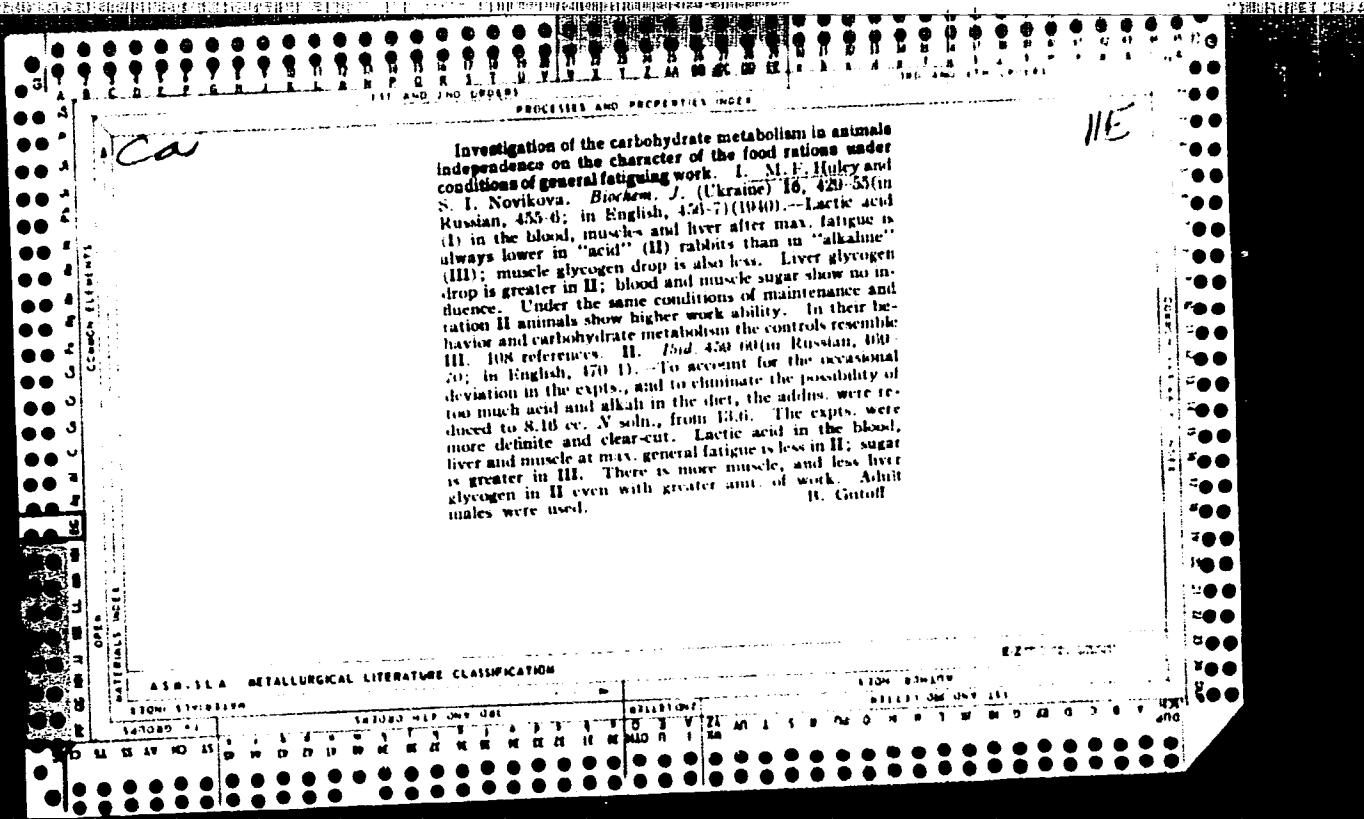
CLASSIFICATION
BY SUBJECT



PROCESSED AND PROPERTIES INDEXED

Glycolytic enzymes in fatigued muscles with basic and acidic diets. M. F. Hulev. *Biochem. J.* Ukraine 13, 151-8(1981) Russian-English, 150-60(1980), v.13, no.4, 33, 5880, 8710^o. With a basic diet fatigue does not influence the glycolytic enzyme system in muscles, while an acid diet causes a rise in the activity of the system. Rabbits were used and diets fed for 30 days.
B. Gutov

ALB-SLA METALLURGICAL LITERATURE CLASSIFICATION



The effect of acid and alkaline rations on the metabolism and clinical indexes in horses during work. P. Ya. Rusik, M. F. Hulev, L. I. Grebinik and S. I. Novikova. *Biol. Zhurn.* 17 (Ukraine) 16, 527-43 (in Russian, 543-4; in English, 544-6) (1940).—In fatigue pulse, respiration and temp. increase were less and returned to normal sooner in 11 out of the 22 "acid" horses than in normal or alk animals. At rest the alk. reserve of the blood is less on the acid diet and tends to drop with work under both forms of feeding. In work the blood sugar change is insignificant regardless of the form of food. In fatiguing work the lactic acid remains stationary or increases much less on an acid than on an alk. diet.
B. Gintoff

1/E

CLASSIFICATION

ASH-15A METALLURGICAL LITERATURE CLASSIFICATION

Formation of lactic acid in the skeletal muscles from glucose. M. E. Huley, Ukraine, Biochem. J. 10, 63-75 (1910). To determine the source of increase of lactic acid in minced muscles occasionally observed in the presence of glucose under anaerobic conditions, the straight thigh muscle of the rabbit (400 mg.) was added to 1 ml. phosphate buffer (0.09 M), pH 7.3-7.4; the content of glucose was varied from 0.3 to 1.0%; O₂ was slowly passed through the suspension, and for anaerobic conditions the app. was evacuated. There was no increase of lactic acid in anaerobic incubation for 2 hrs. (at 38°); 1-hr. aerobic followed by 1-hr. anaerobic incubation with glucose increased the lactic acid by 150-200 mg. %; increasing the aerobic period to 2 hrs. produced a smaller uv. increase of lactic acid; apparently the period of respiration necessary for the phosphorylation of glucose lasts about 1 hr. In a series of 3 expts., 2-hr. anaerobiosis with glucose gave 280.1, 283.7, and 243.4 mg. % lactic acid; 1-hr. aerobic and 1-hr. anaerobiosis with glucose, 437.2, 207.4, and 297.1 mg. %; 1-hr. aerobic and 1-hr. anaerobiosis without glucose, 271.6, 165.5, and 208.5 mg. %; preliminary aerobiosis insured the formation of lactic acid only in the presence of glucose. Boris Gutoff.

Boris Gutev

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Chemical Abst.
Vol. 48 No. 8
Apr. 25, 1954
Biological Chemistry

The role of hexoadiphosphoric acid in esterification processes in muscle extracts. M. P. Gulyi and M. A. Kolomichenko [mas]. Biochem. Acad. Sci. Ukr.R.S.R., Kiev.), Ukrains. Biokhim. Zhur. 18, 231-63 (in Russian, 203-4) (1949).—The esterification of inorg. P in the presence and absence of starch (I), adenylic acid (Ia), ICH_2COOH (II), phlorizin (III), was studied with hexoadiphosphoric acid (IIIa) in muscle exts., which were poor in coenzymes and had undergone prolonged autolysis. The exts. were prep'd. from the muscles of the back and hind legs of freshly killed rabbits. The first ext. with H_2O was discarded, after this several exts. were obtained by extg. with 0.35% $\text{K}-\text{HPO}_4$. The expts. lasted 1-8 days and were done in a refrigerator in the presence of toluene. The final solns. were analyzed for Embden ester, Cori ester (IV), hexosemonophosphate, etc. IIIa, when being added to such exts. in the presence of I, raises the esterification of inorg. P 150 - 270% as compared to the phosphorolytic esterification in absence of IIIa. The esterification of inorg. P does not occur if IIIa is added to these exts. without I, or if IIIa and IV are used without I. The increased esterification of the inorg. P in the presence of IIIa and I is a phenomenon different from the activation of the phosphorolysis by means of Ia. This rate increase with I and IIIa is but little affected by II, but affected by III just the same as phosphorolysis. In the esters formed in the presence of I and IIIa less hexosemonophosphoric acids are formed than in the case of phosphorolytic esterification, but in their place a corresponding amt. of IIIa forms. The formation of IIIa in the presence of I and IIIa occurs in exts. in which no lactic acid is formed, in which there is no oxidation-reduction, and which are not affected by high concns. of II. Werner Jacobson

Chemical Abst.
Vol. 48
Apr. 10, 1954
Biological Chemistry

(4)

A new path for the conversion of ammonia nitrogen into amino nitrogen in animal tissues. M. A. Kolomilchenko, M. P. Gulya, and G. I. Dubravina (Inst. Biochem., Acad. Sci. Ukr. R.S.R., Kiev). *Ukrain. Biokhim. Zhur.* 21, 175-82 (in Russian, 182-4) (1950).—Livers of rabbits, dogs, and low breeds of cattle were extd. with a 0.25% K_2HPO_4 soln. in the ratio 1:1, and then thoroughly centrifuged. The clear ext., 1 cc., if incubated anaerobically with NH_3 and citric acid (I), transformed at least 450 γ of this N into amino N in 2 hrs. Quant. detns. showed that every mole of NH_3 when disappearing uses roughly 1 mole of I, which is remarkable because one knows that I with liver exts. is partly transformed into *cis*-aconitic acid (II) and isocitric acid (III). It was found by the Bergman and Fox method that the resulting amino acid is glycine (IV). The quantity found suggests the correctness of the following equations: $NH_3 + I = IV + \text{malic acid (V)}$; $NH_3 + II = IV + \text{fumaric acid}$; $NH_3 + III = IV + V$. Werner Jacobson

GULY, M. F.

The nature of the interaction between enzymes and polysaccharides in the phosphorylation reaction. III. M. S. Guly and M. A. Kolomischekova (Inst. Biokhim., Akad. Nauk Ukr., S. S. R., Kiev), *Ukrain. Biokhim. Zhur.*, 21, 228-37 (in Russian, 237-8) (1949).—New evidence has been adduced indicating that polysaccharide enters into a liaison with the enzyme-protein of phosphotriphosphate and becomes a constituent part of the activating catalyst. Arsenite strongly inhibits the phosphorylative breakdown of polysaccharide and markedly enhances the synthetic action of rabbit muscle phosphorylase. Arsenite also inhibits the action of phosphoglucuronatase and phosphohexosidase. Mn ions counteract the inhibiting effect of As on the action of phosphoglucuronatase. Hexadiphosphate, inorganic phosphate, and phosphoglyceric acid enhance the activity of phosphorylase of rabbit muscle. II. S. Levitin

July, 1951

The synthesis of purines and their nature in tissues of healthy and carcinomatous animals. M. V. Gulyi and V. P. Korotkovich (Inst. Biochem., Acad. Sci. Ukr. S.S.R., Kiev). *Ukrain. Biokhim. Zhur.* 23, 327-34 (1951); cf. *Ibid.* 22, 36 (1950).--Liver homogenates of normal rabbits at incubation temp. synthesize basic aminopurines, such as adenine and to a lesser degree guanine and xanthine (livers of normal birds synthesize oxypurines). Hypoxanthine remains unchanged. Uric acid may be reduced, remain unchanged, or increase. Allantoin is increased. The liver homogenate of carcinomatous rabbits (Brown-Pearce) in these expts. generally brought about a breakdown of the purines. A lessening in the purine N occurred mostly at the expense of adenine, to a lesser degree at the expense of a fraction of guanine-xanthine and uric acid. Hypoxanthine remained unchanged. The increase in the allantoin was insufficient to equate the quantity of broken-down purine bases. B. S. Levine

(1)

GULYY, M.F.

Purine synthesis in the animal organism; a survey. Ukr.biokhim.
zhur. 23 no.4:465-483 '51. (MLRA 9:9)

1. Institut biokhimii Akademii nauk USSR, Kiyev.
(PURINES)

July 1954.

Chemical Abstracts
May 25, 1954
Biological Chemistry

(2) Metabolism, connected with self-restoration of protein,
as a fundamental feature of life. M. F. Gulyi (Inst.
Biokhim. Acad. Sci., Ukr. S.S.R., Kiev). *Ukrain. Bio-
khim. Zhur.* 24, 3-18(1952). W.J.

Chemical Abstracts

May 25, 1954
Biological Chemistry

The nature of the amino acids which are produced when ammonia is bound by liver extracts in the presence of citric acid. M. A. Kolomitschenko, M. P. Gulyi, and G. I. Dubravina (Inst. Biochem., Acad. Sci. Ukr. S.S.R., Kiev) Ukrains. Biokhim. Zhur. 24, 184-70 (in Russian, 79-80) (1952); cf. C.A. 48, 40784.—Liver exts. from rabbits were used. The anaerobic process of the binding of NH₃ in the presence of citric acid in these exts. proceeds simultaneously in different ways with the production of glutamic and aspartic acids and other N compds. which are unknown at the present time. Glycine (I) does not appear to be produced in these processes, as shown by the fact that its presence inhibits the binding of NH₃. NaF, semicarbazide, and Na-AsO₄ do not slow down the process; on the contrary, these cause an acceleration. If I is added to these liver exts., its effect disappears partially upon incubation. W. J.

GULYK, M.F.

A method of purification of diphtheria toxin and antitoxin. A. G. Sabalyr, M. P. Gulyk, S. M. Terekhov, I. S. Asparuhova and A. I. Romashova. Inst. Biokhim. i. Inst. Epidemiol. and Microbiol., Ministry of Health, U.R.S.S.R., Kiev, Ukraine. Dokl. Akad. Nauk. SSSR. 137-47 (in Russian, 147-8)(1962); cf. Mikrobiol. Zhur. 14,

No. 4, 2(1962).—Pptn. was carried out in a room not exceeding 4°, M AcOH being used for the 1st pptn., and 0.20- M AcOH for the 2nd, in amt. to bring the pH to 3.8 for total antitoxin. By adding toxin or antitoxin to acid, rather than vice versa, and by changing the pH gradually, the desired protein was not damaged. To 400 ml. of M AcOH was added with stirring 2 l. of the antitoxin. The resulting mixt. was then poured into the theoretical amt. of AcOH minus the 400 ml. previously used, and finally the remaining amt. of nonacidified antitoxin (from 2 to 60 l.) then added, followed after 10-20 min. by filtration through several filters, filtration time not being crit. The ppt. then was dissolved in 0.4% NaHCO₃, and the pH brought to 7.4 with 4% KOH and filtered. The process was repeated. Results are better for large-quantity purification than for small. For purified toxin samples of mixed from 10 to 23 l., after the 1st pptn., the mg. N/Lf unit varied from 0.0020 to 0.0040, yield 50-90%, and for the 2nd pptn., 0.0010-0.0013, 64-100% with respect to the 1st pptn. Flocculation time was reduced to 5-7 min. for the toxin. For purified antitoxin obtained from 2 to 23 l., mg. N/Lf unit: 1st pptn. 0.0031-0.0065, 52-70%; 2nd, 0.0010-0.0026, 74-100%; flocculation time 3-10 min. for both pptns. Figures are also given for 20-60 l. batch processing. Damage to the product in the usual acid. pptn. methods occurs in the first moment of acidification, which the present procedure avoids. This improved method prevents postdenaturation changes, secures more complete

reversibility of the denaturation processes, and gives a high-quality product! Clayton R. Holloway

(4)

GULY, M. F.

Diphtheria toxin and antitoxin preparations, concentrated and purified by the method of precipitation at the isoelectric point. S. M. Terekhov, P. S. Astakhova, B. I. Nemtsova, G. F. Gulya, and A. G. Subchalov. (Biochem. Inst. and Inst. Endocrinol. and Microbiol. Acad. Sci. Ukr. S.S.R., Kiev), Ukraine, Biokhim, Zhur. 24, 149-67 (in Russian) 157-8 (1952).—Data are given which indicate that the immunogenic properties of purified antitoxin (cf. preceding abstr.) are in no way damaged, even when 90.5% of the inert protein has been removed. Nontoxicity of the purified antitoxin is established, and it is further shown that the protective action of purified antitoxin is much greater than that of the original. Samples of purified toxin were very labile, toxic properties decreasing upon purification. Conversion of toxin to antitoxin by the use of HCHO was carried out under different conditions, and it was found that there was a relatively small decrease in flocculation titer at time when the toxin was converted to antitoxin by a single addn. of 0.2% HCHO to the undil. purified and concd. toxin.

Clayton F. Holoway

(4) MFT

KOROTKORUCHKO, V.P.; HULYY, M.E.

Synthesis of purine-containing compounds in tissues of healthy animals and
those sick with malignant tumors. Ukr.biokhim.zhur. 24 no.4:434-441 '52.

(MLRA 6:11)

1. Instytut biokhimiyi Akademiyi nauk Ukrayins'koyi RSR, Kyyiv.
(Purine) (Cancer) (Tissues)

GULIY, M.F. (Kiev).

Variability of proteins. Ukr.biokhim.zshur. 25 no.4:367-387 '53,
(MLRA 6:11)
(Proteins)

GUYY, M.F., professor, chlen-korrespondent.

Artificial production of antibodies outside the organism. Priroda 42 no.9:
73-76 S '53. (MLRA 6:8)

1. Institut biokhimii Akademii nauk SSSR. 2. Akademiya nauk Ukrainskoy SSR.
(Antigens and antibodies)

GULYI, I..

"Artificial production of antibodies outside the organism" (p.81) "Sex hormones in clover"
(p.84) PRIRODA
(Bulgaraska Akademija Na Naukite) Sofiya Vol 3 No 1 Jan/Feb 1954

SO: East European Accessions List Vol 2 No 6 Aug 1954

Gulya, M. F.

Fractionation and crystallization of water-soluble muscle proteins. M. F. Gulya, P. D. Dvernikova, M. A. Kolomitschenko, and O. Ya. Popadyuk. *Ukrain. Biokhim. Zhur.* 26, 130-7 (in Russian, 1978) (1954).—The proteins of fresh, cooled, and twice-ground rabbit muscles were extd. in the cold with an equal vol. of 0.25% K_2HPO_4 . Then a $(NH_4)_2SO_4$ was added to 0.25 satn.; after 15-20 min. the ppt. was centrifuged and removed; to the clear supernate $(NH_4)_2SO_4$ was added to 0.85 satn.; a new ppt. formed which was centrifuged down 25-30 min. later; the supernate was poured off completely and the ppt. dissolved in a min. vol. of the original K_2HPO_4 soln. After two-day standing in the refrigerator a cryst. ppt. was formed which had high adenosinetriphosphatase activity. By bringing the supernate up to 0.45 satn. and letting it stand for 30 min., a protein ppt. was formed; upon dissolving the latter in phosphate buffer and letting it stand in the cold for 24 hrs. crystals of the shape of cucumber seeds were formed. This protein fraction possesses

phosphohexokinase activity which in the presence of protein pptd. by 0.50 satn. by $(NH_4)_2SO_4$, transfers PO_4^{3-} groups from adenosinetriphosphate acid to fructose-6-monophosphate. The protein fraction of 0.80 satn. crystallizes out in the cold from phosphate soln. in 0-7 hrs. in hexagonal double pyramids. This fraction is identical with myogen A, obtained by the method of Berndovs'kii (C.A. 53, 14114) and Dvernikova (C.A. 48, 12215c). The ppt. treated at 0.65 satn. is discarded and satn. brought up to 0.60. The ppt. formed crystallizes out in the cold from phosphate soln. in 2-3 days as thin needles loosely packed in sheaves. At 0.65 satn. a protein fraction is obtained which, when treated as above, forms crystals in the shape of long narrow and flat streaks. Crystn. and preservation is best accomplished at room temp.; the fraction possesses a high endopeptidase activity. Above 0.65 satn. protein fractions are obtained which seemingly do not differ from the protein fraction of 0.60 satn.; their identity has not been detd. B. S. Levine

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Gulyk, M. I.

USSR

The crystalline protein fraction 0.50 (myogen A) of animal muscle. P. D. Dvornikova, M. V. Gulyk, and O. Ya. Popadynuk. *Ukrain. Biokhim. Zhur.* 26, 246-52(1954); cf. *C.A.* 48, 7070a; 49, 1110b.—A method was described for the continuous sepn. of 5 muscle protein fractions. In this study it was shown that one of these fractions (fraction 0.50 said.) by the shape of its crystals, its solv., isoelec. point, enzyme activity, mol. enzyme activity, and mol. wt. is identical with the fractions obtained by Baranovskii (*C.A.* 35, 14214) and D. (*C.A.* 48, 12215d) which was designated as myogen A. The present method for obtaining this protein fraction is simpler, less time consuming, and assures a product of high purity. B. S. Leying

July 1, 1954.

USSR

The nature of muscle phosphohexokinase. M. P. Guly,
P. D. Dvornikova, and O. Ya. Popaduk. *Ukrain. Biokhim. Zhur.* 26, 251-60 (Russian, 261)(1954).—Muscle protein fraction 0.45 obtained by a procedure previously described (cf. *C.A.* 49, 1110b) was studied in detail after purification by recrystn. The higher the purity of the final product the lower its enzymic activity, until at the highest point of purity it completely disappears. The adm. of some fraction 0.50 (cf. preceding abstr.) to the highly purified and enzymically inactive crystals of fraction 0.45 reactivates its phosphohexokinase, although it alone has no such enzymic activity. Other muscle and egg albumin protein fractions failed to reactivate the phosphohexokinase of the purified fraction 0.45. It is hypothesized that muscle protein fractions 0.45 and 0.50 are specific constituents of the complex hexophosphokinase. Other hypothetical deductions are discussed.
B. S. Levine

Gulyy, M. F.

USSR/Medicine - Antibiosis

Card 1/1 : Pub. 86 - 24/40

Authors : Bilay, V. I.; Gulyy, M. F., Prof.; and Pidoplichko, N. M.

Title : A new antibiotic (Microcide)

Periodical : Priroda 43/4, 105-107, Apr 1954

Abstract : A general explanation of the theory of antibiotics is given. An account is also presented of extensive research conducted by Soviet scientists for the purpose of obtaining bactericides from fungi, lichens and higher forms of vegetation which resulted in the production of an antibiotic having high bactericidal properties and at the same time capable of retaining its effectiveness within a considerable range of variation in temperature and other surrounding conditions.

Institution : Inst. Biochem., AS USSR

Submitted :

GULYY, M.F., redaktor; BELITSER, V.A., redaktor; SNEZHIN, M.I.,
~~redaktor~~; SIVACHENKO, Ye.K., tekhnicheskiy redaktor.

[Proteins, their special properties] Soveshchaniia po
probleme belka, Kiev, 1954. Belki, ikh spetsificheskie
svoistva; trudy soveshchaniia. Kiev, Izd-vo Akad.nauk
USSR, 1955. 246 p. (MLRA 8:10)

1. Chlen-korrespondent AN USSR (for Gulyy, Belitser).
(Proteins)

GULIY,M.F.

The 70th birthday and the 50th anniversary of the Scientific
activities of Academician A.V.Palladin, Hero of Socialist
Labor. Visnyk AN URSR 26 no.9:56-60 S'55. (MLRA 8:11)

1. Chlen-korrespondent Akademii nauk URSR
(Palladin, Aleksandr Vladimirovich)

GULYK, M.F.

USSR

The enrichment of silage of different plant origin with organic nitrogenous compounds. M. V. Gulyk, M. A. d' Kolomilchenko, R. G. Detyar, and K. I. Veresenko (Inst. of Biochem., Acad. Sci. Ukr. S.S.R., Kiev). *Ukrain. Biokhim. Zhur.* 27, 78-80 (Russian summary, 80-2) (1955).
It was previously reported (cf. *Sozialistische Pflanzennahrung* 7, 12, 1952) that in the process of the microbial silage fermentation added inorg. N salts are converted into org. N compds. of nutritive value, enriching the silage as an animal fodder. The new org. N compds. are mostly amino acids, amides, and the like. Regardless of the type of the NH₄ salt added to the silage the degree of its conversion into org. N compds. is about the same and depends upon the amt. added. The optimum was 1 kg. of N or 4.7 kg. of (NH₄)₂SO₄/ton of the green material. The silos were in the form of trenches of 100-ton capacity. Corn, sunflower, and sugar-beet-top silage with and without added (NH₄)NO₃, at 4.7 kg./ton, were studied. Under the usual conditions of silage fermentation (controls) the naturally occurring org. N substances were reduced during the fermentation process as follows: in corn silage 20.1%; in sunflower silage 9.8%; in sugar-beet-top silage 30.0%. The addn. of (NH₄)₂SO₄ at the rate indicated reduced such loss correspondingly to the following: 11.5, 9.0, and 24.3%. The org. N substances converted from the NH₄-salt constituted addns. of nutritive N compds. in the following percentages: corn silage 1.48%; sunflower 0.83%; and sugar-beet tops .81% on the dry-wt. basis.

B. S. Levine

GULY, M.F.

USSR

The effect of salts of ammonia on the loss of organic nitrogenous substances in clover silage. M. P. Guly, R. G. Detyar, and K. I. Veresenko (Inst. Biochem. Acad. Sci. Ukr. S.S.R., Kiev). *Ukrain. Biokhim. Zher.* 27, 83-9 (Russian summary 87-8)(1963).—Clover was used as silage material with 4.7 and 9.0 kg. of $(\text{NH}_4)_2\text{SO}_4$ /ton of silage being added. Absolute values of data are different but general trend of results and conclusions are the same as in previous expts. (cf. preceding abstr.). B. S. Levine

JULY, M.F.
GULY, M.F.

CH
The properties of crystalline phosphophokinase of rabbit muscles. M. F. Gulyi, P. D. Dvernikova, and O. Ya. Popaduk (Inst. Biochem., Acad. Sci. Ukr. S.S.R., Kiev, Ukraine, Birkhem. Zhur. 27, 299-310 (Russian summary) 311 (1985); cf. C.A. 93, 9706e.---The cryst. of phospho-

hexokinase (PHK) of rabbit muscles takes place overnight in the absence of a primer at pH 9.8-9.9, temp. -5° to 0°, and at 0.31-0.35 $(\text{NH}_4)_2\text{SO}_4$ satn. Raising the protein content of the mother liquor to near 10% and the $(\text{NH}_4)_2\text{SO}_4$ satn. slightly causes the appearance of crystals of tryptamidine myogen A along with those of PHK. Prolonged maintenance of the PHK crystals in the mother liquor or in a soln. of $(\text{NH}_4)_2\text{SO}_4$ causes them to become insol. No effective solvent has thus far been found. Solns. of fresh PHK crystals are very unstable and ppt. very rapidly in aggregate form, even in the presence of myogen A or of gum arabic. The ppts. aggregate possesses enzymic activity which becomes lowered with time. The molar activity or the migration index (no.) of cryst. PHK reaches a value of 1800-2300. The activity of cryst. PHK rises in the presence of cysteine and is considerably greater in the presence of myogen A. Cryst. serum albumin fractions do not activate cryst. PHK to any noticeable degree. PHK prepns. do not transport P from inorg. pyrophosphate or from adenosinediphosphate to fructose-6-phosphate or from adenosetriphosphate (ATP) to glucose or pentose. The max. light absorption by solns. of cryst. PHK in the ultraviolet region is observed at 2700 Å., the min. at 2500 Å. For myogen A the values are correspondingly 2800 Å. and 2500-2550 Å. PHK transports P from ATP to fructose-6-phosphate at pH 4.0-11.5, the optimum being pH 6.0-9.0. The temp. range for the enzymic activity of PHK is 22-60°, the optimum being at 45-55°.

B. S. Levine

(2)

CHEPINOGA, Ol'ga Petrovna; GULYY, M.F., otvetstvennyy redaktor; GRUDZINSKAYA, O.S., redaktor; ZHUKOVSKIY, A.D., tekhnicheskiy redaktor

[Nucleic acids and their biological role] Nukleinovye kisloty i ikh biologicheskaya rol'. Kiev, Izd-vo Akademii nauk USSR, 1956.
182 p. (MLRA 9:11)

1. Chlen-korrespondent AN USSR (for Gulyy)
(Nucleic acids)

GULIY, M.F.

Achievements in biological studies for the benefit of Soviet
people. Visnyk AN URSR 27 no.2:53-64 P '56. (MLRA 9:6)
(Ukraine--Biology--Study and teaching)